

REMARKS

Applicants respectfully request reconsideration of this application as amended. Claims 1, 32, and 38 have been amended, and claims 28, 34, and 40 have been cancelled by this Response. Therefore, claims 1, 27, 29-33, and 35-40 are presented for examination.

The amendments to the claims and cancellations made by this Response are not being made for the purpose of patentably distinguishing the claimed invention over the prior art. Instead, these amendments and cancellations are being made to clarify the claimed inventive subject matter. None of the amendments made by this Response add new subject matter, and all of the amendments made by this Response are fully supported by the originally filed application.

35 U.S.C. §103(a) Rejections

In order to establish a *prima facie* case of obviousness:

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." (Emphasis added). *In re Vaech*, 947 F.2d 488, 20 USPQ2d 1438

(Fed. Cir. 1991). Manual of Patent Examining Procedure (MPEP), 8th Edition, August 2001, §2143.

Anderson et al. in view of Witt

Claims 1, 27-29, 31-35, 37-41 and 43 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson, et al. (U.S. Patent No. 6,598,123) in view of Witt (U.S. Patent No. 5,623,627).

Applicants respectfully submit that the Examiner has not established a prima facie case of obviousness because there is no suggestion or motivation in Anderson or in Witt for modification or combination.

There is no suggestion or motivation in Anderson or in Witt for modification or combination

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). MPEP §2143.01. Furthermore, though a combined element may be a "technologically simple concept", the reference must still provide the motivation for the combination. (*In re Kotzab*, 217 F.3d at 1371, 55 USPQ2d at 1318.) MPEP §2143.01.

Anderson discloses a snoop filter in a multiprocessor system that is configured to reduce the number of back invalidates that would otherwise be

required in order to reduce bus traffic and cache misses (see Anderson, for example, column 2, lines 59-62). Witt discloses a memory architecture having a first level cache and a replacement cache on the same microprocessor die (see Witt, for example, Abstract).

Both Anderson and Witt lack the motivation for modification or for combination with one another that would result in the Applicants' invention as recited in the claims. While both references are directed to the general subject matter of caches, Anderson is directed to solving a problem the problem of replacing snoop filter entries in a multiprocessor system, while Witt is directed to solving a cache arrangement problem in a single system. Neither reference provides the motivation for modification or for combination with one another in such a way as to produce the Applicants' claimed invention as each reference solves a problem inherent in its own type of system.

Therefore, Applicants respectfully submit that the Examiner has not established a prima facie case of obviousness because there is no suggestion or motivation in Anderson or Witt to modify the references, or to combine the teachings of Anderson and Witt.

Anderson et al. in view of Witt and Weber

Claims 30, 36 and 42 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson, in view of Witt, further in view of Weber (U.S. Patent No. 6,631,448).

Applicants respectfully submit that the Examiner has not established a prima facie case of obviousness because there is no suggestion or motivation in Anderson, Witt, or Weber for modification or combination.

There is no suggestion or motivation in Anderson, Witt, or in Weber for
modification or combination

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). MPEP §2143.01. Furthermore, though a combined element may be a "technologically simple concept", the reference must still provide the motivation for the combination. (*In re Kotzah*, 217 F.3d at 1371, 55 USPQ2d at 1318.) MPEP §2143.01.

As discussed above, the combination of Anderson and Witt is not appropriate because the motivation for combination is not provided in either reference. Furthermore, Weber does not provide the motivation for combination of Anderson, Witt, and Weber. Weber discloses a directory-based cache coherence protocol in which each node in a multiprocessor system has an MCU (Mesh Coherence Unit) that maintains a directory to track its own memory lines that are in use by remote nodes (Weber, column 5, lines 55-56). Weber, however, does not provide the motivation for combining the teachings of Anderson and Witt, and also does not provide the motivation for combination with

Anderson (which uses a snoop filter) or with Witt (which is directed to a single processor system).

Applicants respectfully submit that the Examiner has not established a prima facie case of obviousness because there is no suggestion or motivation in Anderson, Witt, or Weber to modify the references, or to combine the teachings of Anderson, Witt, and Weber.

CONCLUSION

Applicants respectfully submit that the claims as amended are in condition for allowance. Therefore, allowance at an early date is earnestly solicited.

The Examiner is invited to initiate an interview with the undersigned by calling 949-498-0601 if the Examiner believes that such an interview will advance prosecution of this application.

Request for an Extension of Time


Applicants respectfully petition for a one-month extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a). Please charge our Deposit Account No. 50-0221 to cover any necessary fee under 37 C.F.R. § 1.17(a) for such an extension.

Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 50-0221.

Respectfully submitted,

Date: December 20, 2004



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